DESCRIPTIONS OF JAVANESE BRACONIDAE (HYM.) RECEIVED FROM Mr. S. LEEFMANS

by

S. A. ROHWER.

(Forest Insects, Bureau of Entomology, Washington, D. C.)

The following pages contain descriptions of four species of Braconidae received from Mr. S. LEEFMANS. The types of all these are in the United States National Museum.

Apanteles papilionis (VIERECK).

Apanteles (Protapanteles) papilionis VIERECK, Proc. U.S. Nat. Mus., vol. 42, 1912, p. 145.

Six specimens of this species, which was originally described from Mysore, India, were received from Mr. S. LEEFMANS with his letter dated November 27, 1919 and said to have been reared from larvae of *Papilio sarpedon* LINNAEUS at Buitenzorg, Java.

Apanteles homonae, new species.

Probably closest to Apanteles taragamae VIERECK but may be separated from that species by the areolation of the propodeum and shape of the second tergite.

Female. - Length, 2.5 mm.; length of ovipositor 1 mm. Head subopaque, finely reticulato-punctate; postocellar line slightly shorter than the ocellocular line; antennae 18 jointed, the joints beyond twelfth shortened; scutum opaque, closely punctured, the punctures tending to become confluent anteriorly; mesepisternum with distinct rather close punctures; scutellum polished, the basal furrow and the dorsal lateral furrows finely foveolate; lateral faces of scutellum polished; propodeum shining, areola and petiolar area confluent forming a large shining area which is broader where the transverse carinae join it, all carinae strong; first tergal plate rectangular in outline, strongly convex medially where it is aciculato-granular, laterally it is aciculate, apically these aciculations curve towards the middle where they join a shining tubercule; second tergite as long as first, twice as wide as long, basally and laterally with an oblique impressed line; tergites beyond first smooth and shining; ovipositor as long as abdomen, straight below, convex above, sharply pointed apically, curved slightly downward at tip. Black; anterior legs beyond middle of femora, intermediate tibiae and tarsi, basal two-thirds of posterior tibiae, all of hind tarsi, reddish-yellow; tibial spurs white; wings hyaline, venation yellowish-brown with stigma paler.

Male. - Length, 2.25 mm.

Host, — Homona coffearia.

Type-locality.— Tjiapoes, 700 M. near Buitenzorg, Java.

Type. — Cat. No. 23113, U. S. N. M.

Described from five females (one type) and one male reared from the larva of *Homona* sp. (*H. coffearia* teste subsequent letter) by S. LEEFMANS and sent under his letter "K".

Apanteles hidaridis, new species.

Separated from *Apanteles physodis* VIERECK by the more sparsely sculptured first tergal plate,

Female.— Length, 2 mm. Inner margins of eyes slightly converging below; face shining, with distinct separate punctures; vertex with fine punctures; antenna slightly shorter than the body; mesoscutum shining, with close distinct punctures; suture in front of scutellum broad, not foveolate; disk of scutellum shining without sculpture; sides of scutellum polished; propodeum rather long, shining; first tergal plate slightly longer than basal width, margined laterally, slightly wider basally, shining, with few punctures; second tergal plate narrow, not sharply separated from the third; sheath narrow, shorter than the abdomen; stigma broad, angulate somewhat beyond middle; no areolet. Black; four anterior legs below femora, base of posterior tibiae brownish-yellow; wings hyaline, with rather long hairs; venation, except pale brown costa and stigma, pallid.

Male.— Length, 2 mm. Essentially as in female.

Type-locality.— Padang, Sumatra.

Type. — Cat. No. 23925, U.S.N.M.

Described from thirteen females (one type) and two males (one allotype) received from S. LEEFMANS with his letter dated April 8, 1919 and under his number 3 and said to have been reared from the larva of *Hidari*.

Apanteles parasae, new species.

Allied to *Apanteles taragamae* VIERECK from Mysore, India but may be distinguished by the narrower sheath and punctured scutellum.

Female, — Length, 2 mm. Eyes slightly convergent below, clypeus shining, with separate distinct punctures; face sculptured like the clypeus, convex medianly; frons and orbits polished; median part of vertex with close, fine punctures; antenna a little shorter than the body; mesoscutum with rather large, close, distinct punctures; suture in front of scutellum broad, foveolate posteriorly; disk of scutellum about one third as wide at the apex as at the base, the bounding furrows foveolate, the surface shining with well separated punctures; propodeum short, the truncate posterior face separated by a sharp carina laterally, and medianly with a large U-shaped area; mesepisternum shining, with small punctures dorsally; first tergite plate nearly quadrate, coarsely striato-punctate anteriorly and feebly so posteriorly; tergites beyond the first polished; the second tergal plate more than three times as wide as long; sheath slightly shorter than the abdomen, narrow; stigma large angulate beyond the middle; no areolat. Black; four anterior legs beyond bases of femora, basal half of hind tibiae and narrow base of hind basi-tarsi sordid-whitish; wings hyaline; venation, except the pale brown stigma hyaline.

Male. - Length, 2 mm. Essentially as in female.

Type-locality. — Buitenzorg, Java.

Type. — Cat. No. 23924, U.S. N. M.

Described from eight females (one type) and five males (one allotype) reared from the larva of *Parasa* species by S. LEEFMANS and transmitted with his letter dated April 8, 1919 and under his number 5.

Macrocentrus sp.

Four males of an apparently new species of *Macrocentrus* reared from larvae of *Homona coffearia* were received from Mr. S. LEEFMANS of Buitenzorg, Java and accompanied by his letter dated November 27, 1919. As only males are known it seems advisable to delay description until the other sex can be studied.

Microbracon leefmansi, new species.

Female. - Length 3 mm. Face opaque, rather coarsely granular; antennae 26jointed, the basal joints not sharply separated, the apical joints well separated, the terminal one sharply pointed and subequal in length with the preceding one; from opaque, rather finely granular; vertex and posterior orbits subopaque; ocelli in nearly an equilateral triangle; the postocellar line shorter than the ocellocular; head receding behind eyes; mesoscutum shining, behind its middle with distinct punctures; notauli not foveolate; suture between scutum and scutellum foveolate; propodeum smooth, polished; first tergite quadrate in outline; second tergite with a shining raised area at the basal middle, slightly longer than the third and separated from it by a finely foveolate furrow which medianly is curved anteriorly; second and third tergites striatoreticulate on a granular surface, the sculpture on the second coarser; fourth and following tergites granular; abdomen short, oval in outline; stigma broad receiving the radius at about the middle; first abscissa of radius but little more than half the length of the first intercubitus; nervulus slightly antefurcal; ovipositor as long as the abdomen. Black; mandibles and palpi yellow; a small spot at superior-interior orbits, anterior legs, mesosternum in part, apices of intermediate femora (more broadly so beneath), base of intermediate tibiae, and basal joints of intermediate tarsi, testaceous; wings dusky-hyaline; venation dark brown.

Male.— Length 2 mm. Antennae 24—25 jointed. Agrees with the above characterization of female.

Host. - Gracilaria theivora.

Type-locality.— Goenoeng Mas (1200 M.) near Buitenzorg.

Type,— Cat. No. 23455 U.S. N.M.

Described from three females (one type) and three males (one allotype) received under letter D from S. LEEFMANS who, in a letter dated November 27, 1919, states that it is a parasite of *Laspeyresia* species. In a subsequent letter, dated Nov. 5, 21, the host is given as *Gracilaria theivora*, Named for Mr. S. LEEFMANS.